Postel

NWG/RFC# 398
UCSB Online Graphics
NIC 11911

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At present, users with TEKTRONIX or IMLAC terminals or with systems that support the proposed Level 0 graphics protocol can access UCSB graphics. Listed below are the ICP sockets for the currently supported terminals and protocols. Any detailed questions about or problems with a particular protocol should be directed to Ed Faeh (805-961-4047). 1

Socket	Supports	
x'701'	IMLAC with special software designed by Jerry Powell (MITRE Corp.). Graphics is sent over a simplex connection to the IMLAC. Alphanumerics are sent over a TELNET-like connection to a separate device. The IMLAC software can be loaded from MIT-DMCG.	1b
x'703'	IMLAC with 80x80 display grid and Standard Text and Edit Package. Some IMLACs have a 64x64 display grid. Therefore, the choice may be made in in the near future to format the graphics output from this connection for the smaller grid resolution so that both terminal types may be handled. Display resolution is limited with this terminal configuration as normal UCSB terminals have a 1024x1024 grid. Nevertheless, meaningful displays are obtained even at the lower resolutions.	1c
x'705'	Current Level 0 graphics protocol.	1d
x'707'	Same as x'701' but with special UCSB online keyboard as input. This configuration averts the necessity of spelling out online operators.	1e
x'709'	Same as x'705' but with special UCSB online keyboard as input.	1f

x'801' TEKTRONIX terminals. Models 4002-A 4010, and T-4002 have been tested successfully. Presumably all other 4002 compatible terminals will also work. 1g

The primary problems that will be encountered by the network user center about display formatting. For historical reasons (i.e. only one type of terminal in house) no means were included in the system to facilitate terminal independent random positioning of alphanumeric output. Thus, a program which draws and labels a graph neatly on one terminal might label like a kindergartener on other terminals. Nevertheless, this problem can be minimized with careful programming and efforts are underway to provide at least minimal alphanumeric device independence. 2

Users interested in experimenting with online graphics should contact John Pickens (805-961-3454), Glen Davis (805-961-2462), or Mark Krilonovich (805-961-3454). Suggestions and criticisms of all aspects of the UCSB Online - Network User interface are desired. 3